

Column 21

"IN EXPERTS WE TRUST" ...OR SHOULD WE?

by Prof. Dariusz Leszczynski

Disclaimer: *the opinions presented in this column are author's own and should NOT be considered as the official opinions of any of Dariusz Leszczynski's employers.*

MELBOURNE, Australia, July 17, 2012--Let me begin with a quote from Thomas Henry Huxley:

"Science commits suicide when it adopts a creed"

...and this is what, in my opinion, is happening in the research on the biological and health effects of cell phone-emitted radiation.

The creed, as I see it, says that:

"...there is consensus among the scientists that cell phone radiation has no proven health effects and that the effects seem unlikely..."

In my opinion, the claims of scientific consensus are false. They are propagated by some expert committees which ignore the fact that some other expert committees disagree entirely. How should the general public read the information presented in expert reviews prepared by different committees & commissions & initiatives? How trustworthy are science evaluations made by these self-proclaimed expert bodies?

There is no doubt that the members of the science evaluating bodies are there because they are considered experts in their field. However, the procedures of selection of experts are not clear and not public.

What is worse, experts with the same opinion on the subject usually end up in the same evaluating body. This is **the 'kiss of death' to any fair scientific debate**. Since the members of evaluation group have the same opinion, there is no need for in depth debate because nobody is challenging the dominant view, whatever it is in the given expert group.

This is not a good development because such preconceived opinions of the evaluation groups have a great impact on the decision-making process by politicians, by the industry, by the scientists at large and finally, for all of us, the final users of the 'evaluation product'.

Currently, the most prominent and influential evaluation group is the International Commission on Non-Ionizing Radiation Protection – ICNIRP. The influential position of this group stems from the fact that the first chairman of ICNIRP was appointed the head of the WHO EMF Project, and since then the WHO begun to use scientific evaluations and recommendations made by ICNIRP. This, in turn, brought to this evaluation group

international recognition, prestige and influence – the WHO recommended what ICNIRP recommended.

What is ICNIRP? It is safe to say that it is a **self-perpetuating private club** where current members of the Main Commission select new members to the Main Commission. This selection process is seen in the composition of ICNIRP that consists of scientists having the same opinion on the matter of EMF and health – the opinion is that there are no proven health effects and that in the future any health effects are unlikely or implausible.

There seems to be consensus within ICNIRP on the health problem, and this ICNIRP consensus is wrongly portrayed by ICNIRP members as consensus of all scientists. It is not.

One of the perpetual complaints about ICNIRP members is that they have links to industry and that they have hidden conflict of interest. Indeed, some ICNIRP members were (are?) sitting on the scientific advisory boards of electric utilities companies of providers of telecommunication services.

To remedy this problem, after years of delay, and to avoid false accusations, as of recently ICNIRP's Main Commission members fill out the conflict of interest statements and these, in scanned format, are available on the Main Commission's website.

Reading these statements shows that there are no strict rules about what information should be included in the conflict of interest statements. For example, some scientists list projects with partial industry funding as a potential source of conflict of interest whereas others, known to have same kind of grants partly funded by the industry, completely omit such information. It suggests that there are no strict rules, and whatever ICNIRP members write and submit is not checked for accuracy and correctness.

There is an entirely different situation with the other influential expert group – the International Committee on Electromagnetic Safety (ICES) that operates in the USA and is part of the influential IEEE. Membership of this committee is open to anyone. I was myself member of ICES for a few years until, disenchanted with the activities, I resigned in 2009.

Membership of ICES is vastly dominated by the scientists employed by the industry, and ICES openly discloses this. The problem is, however, how reliable evaluation of science is when made by predominantly industry-affiliated scientists dealing with the issue of safety of the industrial product. There is clear, and not hidden in any way by ICES, conflict of interest. What is also public knowledge is that the chair of the sub-committee that prepares recommendations for safety standards for the cell phones is a scientist employed by the US cell phone manufacturer.

It means that in the USA the **evaluation of health risks and development of appropriate safety standards is prepared in the USA by industry scientists under direction of cell phone manufacturer's scientist**. The proposed safety standards are then voted by ICES members. Few dissenting opinions, like mine, do not matter.

Scientists, dissatisfied with the dominance of ICNIRP and ICES formed groups that were to prepare science evaluations that would counter-balance the dominating opinions of ICNIRP and ICES.

The general idea of providing counter-balances and was good, but they (scientists) made similar mistake as ICNIRP and ICES/IEEE – they formed groups of scientists with the same opinions and the selection criteria are largely arbitrary and unknown.

The composition of the groups most noted in news-media and by politicians, BioInitiative and ICEMS (International Committee on Electro-Magnetic Safety), clearly shows that the members have the same scientific opinions. No scientific challenges come from within the group, meaning no real scientific debate.

Also, while complaining about the conflict of interest within ICNIRP and ICES, these counter-balancing groups did not avoid conflict of interest of their own – e.g. BioInitiative was set-up and is led by person who has a company providing for a fee services protecting from EMF exposures.

There are two important questions to answer:

1. When the evaluation of science is made by the persons with the conflict of interest, does the disclosure of conflict of interest make the evaluation of science to become reliable?
2. When the evaluating group of scientists is of the same opinion, does the evaluation is reliable when nobody is challenging and asking difficult questions?

In my opinion, to both questions the answer is no.

Even if group members disclose their conflict of interest, it does not mean that they would act against their conflict of interest. Also, when members of the group have the same opinion, reaching a consensus is easy, but this consensus will likely not consider equally all relevant (good quality) scientific evidence.

To my knowledge, there was only one scientific evaluation where group members represented a full scale of diverse scientific opinions. The scientists discussed, debated, argued, provided arguments and contra-arguments, disagreed and agreed and came up with a surprising to everyone recommendation.

It was the IARC recommendation that the cell phone radiation is a possible a carcinogen.

The IARC recommendation disagreed with opinions of ICNIRP, ICES, BioInitiative and ICEMS. This recommendation was developed by scientists through real scientific debate. Where opinions were constantly challenged and proofs were constantly demanded.

Furthermore, the debates at IARC Headquarters in Lyon in May 2011 showed that **there is no such thing as consensus** on the issue of health effects of cell phone-emitted radiation because the available scientific evidence is insufficient. Such claims,

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perpetuated by some groups and individual scientists on both sides of the debate, are misleading and entirely false.

We need more such evaluations as this 'daring first step' made by the IARC.

We need more of real scientific debate and less of 'scientific consensus' demagogy